1

SEQUENCE LISTING

<110> Chermesh, Chen
        Walach , Shira
        Rotman , Galit
        Sella-Tavor, Osnat

<120> SIM2 POLYPEPTIDES AND POLYNUCLEOTIDES ENCODING SAME AND USES
        THEREOF IN DIAGNOSIS AND TREATMENT OF OVARIAN, BREAST AND LUNG
        CANCERS

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ttcactccgc aaatatcctc cactttcagg agggaaaacc caccctacca cagtccgctc    2460

ttccaagtgg acggcagacc tgggagggga cgcctgtgtc acgagccctt ttagatgctt    2520

aggtgaaggc agaagtgatg attgtaagtc ccatgaatac acaactccac tgtctttaaa    2580

agtcattcaa gagtctcatt attttgttt ttatttaacc ctttcttcaa tacaaaaagc    2640

caacaaacca agactaaggg ggtgaccatg caattccatt ttgtgtctgt gaacataggt    2700

gtgcttccca aatacattaa caagctctta cttcccccta accctatga actcttgata    2760

acaccaagag tagcaccttc agaatatatt gaataggcat taaatgcaaa aatatatatg    2820

tagccagaca gtttatgaga atgaccctgt caagcttcat tattacgtgg caaaatccct    2880

ctggcccaca cagatctgta attcactagg ctcgtgtttg ctacaaatag tgctaataaa    2940

gttaaattgc acgtgcaata cggaacactg tcaatggact gcaccttgtg aaggaaaaac    3000

atgcttaagg gggtgtaatg aaaatgatgt agacatttta agcattttct acacagcgag    3060

aaaacttcgt aagaacatgt tacgtgtgca acaggtaaac agaaatcctt tcataaagca    3120

ccagcagtgt ttaaaaaatg agcttccatt aattttact ttttatgggt tttgcttaaa    3180

gatctcaaca tggaaaaatc ctgtcatggc tctgaactgc acaatgcatt gaaccgccgt    3240

ccttcaattt tcttcacact atcaacactg cagcattttg ctgctttatc aaaatggttt    3300

attttaggaa acttttttcc cctttctgaa tggaagagg ttttcacaaa tgtttttaaac    3360

tcatcgttct aaaatcaagt gcacctacac caactgctct caaaatgtga actgactttt    3420

ttttttttt ttttgccaac cctgtgtcac ttagtgagga cctgacacaa tccctacagg    3480

gtgtctgtca gtgggcctca tggtaagagt cacaatttgc aaatttagga ccgtgggtca    3540
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tgcagcgaag gggctggatg gtaggaaggg atgtgcccgc ctctccacgc actcagctat   3600

acctcattca cagctccttg tgagtgtgtg cacaggaaat aagccgaggg tattattttt   3660

ttatgttcat gagtcttgta attaaaccgt gattcttgaa aggtgtaggt ttgattacta   3720

ggagatacca ccgacatttt tcaataaagt actgcaaaat gcttttgtgt ctaccttgtt   3780

attaactttt ggggctgtat ttagtaaaaa taaatcaagg ctatcggagc agttcaataa   3840

caaaggttac tgttgagaaa aaagaccccta tcatagattt acaag   3885

<210> 8
<211> 2823
<212> DNA
<213> Homo sapiens

<400> 8
ggggctccgc gggcctggag cacggccggg tctaatatgc ccggagccga ggcgcgatga   60

aggagaagtc caagaatgcg gccaagacca ggagggagaa ggaaaatggc gagttttacg   120

agcttgccaa gctgctcccg ctgccgtcgg ccatcacttc gcagctggac aaagcgtcca   180

tcatccgcct caccacgagc tacctgaaga tgcgcgccgt cttccccgaa ggtttaggag   240

acgcgtgggg acagccgagc cgcgccgggc ccctggacgg cgtcgccaag gagctgggat   300

cgcacttgct gcagactttg gatggatttg tttttgtggt agcatctgat ggcaaaatca   360

tgtatatatc cgagaccgct tctgtccatt taggcttatc ccaggtggag ctcacgggca   420

acagtattta tgaatacatc catccttctg accacgatga gatgaccgct gtcctcacgg   480

cccaccagcc gctgcaccac cacctgctcc aagagtatga gatagagagg tcgttctttc   540

ttcgaatgaa atgtgtcttg gcgaaaagga acgcgggcct gacctgcagc ggatacaagg   600

tcatccactg cagtggctac ttgaagatca ggcagtatat gctggacatg tccctgtacg   660

actcctgcta ccagattgtg gggctggtgg ccgtgggcca gtcgctgcca cccagtgcca   720

tcaccgagat caagctgtac agtaacatgt tcatgttcag ggccagcctt gacctgaagc   780

tgatattcct ggattccagg gtgaccgagg tgacgggtta cgagccgcag gacctgatcg   840

agaagaccct ataccatcac gtgcacggct gcgacgtgtt ccacctccgc tacgcacacc   900

acctcctgtt ggtgaagggc caggtcacca ccaagtacta ccggctgctg tccaagcggg   960

gcggctgggt gtgggtgcag agctacgcca ccgtggtgca acagccgc tcgtcccggc   1020

cccactgcat cgtgagtgtc aattatgtac tcacggagat tgaatacaag gaacttcagc   1080

tgtccctgga gcaggtgtcc actgccaagt cccaggactc ctggaggacc gccttgtcta   1140

cctcacaaga aactaggaaa ttagtgaaac ccaaaaatac caagatgaag acaaagctga   1200

gaacaaaccc ttaccccccca cagcaataca gctcattcca aatggacaaa ctggaatgcg   1260

gccagctcgg aaactggaga gccagtcccc ctgcaagcgc tgctgctcct ccagaactgc   1320

agccccactc agaaagcagt gaccttctgt acacgccatc ctacagcctg cccttctcct   1380

accattatgg acacttccct ctggactctc acttcttcag cagcaaaaag ccaatgttgc   1440

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cggccaagtt cgggcagccc caaggatccc cttgtgaggt ggcacgcttt ttcctgagca    1500

caatgccagc cagcggtgaa tgccagtggc attatgccaa ccccctagtg cctagcagct    1560

cgtctccagc taaaaatcct ccagagccac cggcgaacac tgctaggcac agcctggtgc    1620

caagctacga aggtgggtca ggtctgctcg tggggaaggt gggaggactg cgcacggccg    1680

ggagccgaag cagccatggc ggtgggtggc agatggagac agaaccctca cgctttgggc    1740

aaacttgccc tctttctgct tctaagtagg gcttgctgtg ctttcttgct ctcaatgcag    1800

gtgctcctcg agagtgagaa atggcagtct gcctgcctcg gggacactag tgacagtata    1860

aagggcaaag gaaaaccgag tatctggcct tcacgtaaat cctggccaca ttcaccaacc    1920

aaaggggggac agtgattttc aaaaccagct cccatgtgct gagaacaccc cagctgcatt    1980

tcttttgcaa gattcctttc cactccaacc agaagtgaat atttgagaca aacggcctat    2040

tggctatttt cccatgccag ttttggaagt ggggaaaact atggtggaaa tttgtgggct    2100

tggggacaga aatgccactc accaacccag ggcaaagaac acaaaccctc caggcctcag    2160

tttcttcacc tgtaaaatgg ggtgaagctg tgatgtgcct actcccaagg acacgacaca    2220

cagtagggac ctgccctgta catgctagtt caacagaaag gaatggcctt tcaccttctc    2280

ctggtggcag gcaagcagat gtcctctgcg gagataccgc cagctcccca ggacgcagac    2340

tgactcctgt ttgctcgctg gaccaacccc aggcagaagg tggaaggtgg aacagaggt    2400

ttagctgcag gacatgtatt cccattgcac cgagacctaa ctgccgctca gagtgtagac    2460

cgagatggtg cagatgcctg cagtgccatt aaaatgtggg tgaaggtgac atcaggatta    2520

tgtgccccag gccgggctca gtggctcaca cctgtaatcc cagcactttg ggaggccaag    2580

gtgggcggat cacctgaggt caggagtttg cgacaagcct gccaacaagc tgaaacccca    2640

tctccactaa aaatacaaaa attagttggg catggtggtg agcacctgta atcccagcta    2700

ctctggaggc tgagatagga ggatcacttg aacccgggag gtggaggttg cagtgagcta    2760

agatcacatc actgcactcc agcctgggta acagagtgag actgtctcaa aaaaaaaaa    2820

aaa                                                                    2823
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<220>
<223>  Single strand DNA oligonucleotide

<400>  10
ggagctggga tcgcacttg                                         19


<210>  11
<211>  21
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  11
ggacagaagc ggtctcggat a                                      21


<210>  12
<211>  23
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  12
tttacaacat aaagcgcatg gtg                                    23


<210>  13
<211>  22
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  13
gtggctactt gaagatcagg ca                                     22


<210>  14
<211>  20
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  14
cctagcagct cgtctccagc                                        20


<210>  15
<211>  18
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  15
ggtgtcctcg ccgaacct                                          18
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<210>  16
<211>  21
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  16
tagggacctg ccctgtacat g                                                    21


<210>  17
<211>  17
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  17
gctggcggta tctccgc                                                         17


<210>  18
<211>  120
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  18
cctagcagct cgtctccagc taaaaatcct ccagagccac cggcgaacac tgctaggcac      60

agcctggtgc caagctacga agcgcccgcc gccgccgtgc gcaggttcgg cgaggacacc     120


<210>  19
<211>  101
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  19
tagggacctg ccctgtacat gctagttcaa cagaaaggaa tggcctttca ccttctcctg      60

gtggcaggca agcagatgtc ctctgcggag ataccgccag c                         101


<210>  20
<211>  101
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  20
tgggtgtgtt gcaagtttca tactcctaca tattataagt gacactaata tcagggacaa      60

ctaagtgctg gggaacttca atgaaaacct ggctggtaaa g                         101
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13

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<210>  21
<211>  20
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  21
ctggcaagca gctggaagat                                                    20


<210>  22
<211>  23
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  22
tttcttagca ccaccacgaa gtc                                                23


<210>  23
<211>  101
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  23
ctggcaagca gctggaagat ggacgtactt tgtctgacta caatattcaa aaggagtcta       60

ctcttcatct tgtgttgaga cttcgtggtg gtgctaagaa a                          101


<210>  24
<211>  25
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  24
cagtgattat aggctttcgc tctaa                                             25


<210>  25
<211>  23
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  25
cagggctatt ggttgaatga gta                                               23


<210>  26
<211>  134
<212>  DNA
<213>  Artificial sequence
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<220>
<223> Real time PCR amplicon

<400> 26
cagtgattat aggctttcgc tctaagatta aaaatgccct agcccacttc ttaccacaag   60

gcacacctac accccttatc cccatactag ttattatcga aaccatcagc ctactcattc   120

aaccaatagc cctg   134

<210> 27
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 27
gtaacccgtt gaaccccatt   20

<210> 28
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 28
ccatccaatc ggtagtagcg   20

<210> 29
<211> 151
<212> DNA
<213> Artificial sequence

<220>
<223> Real time PCR amplicon

<400> 29
gtaacccgtt gaaccccatt cgtgatgggg atcggggatt gcaattattc cccatgaacg   60

aggaattccc agtaagtgcg ggtcataagc ttgcgttgat taagtccctg ccctttgtac   120

acaccgcccg tcgctactac cgattggatg g   151

<210> 30
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 30
tgagagtgat tcgcgtgggg   19

<210> 31
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 31
ccagggtacg aggctttcaa t   21

<210> 32
<211> 91
<212> DNA
<213> Artificial sequence

<220>
<223> Real time PCR amplicon

<400> 32
tgagagtgat tcgcgtgggt acccgcaaga gccagcttgc tcgcatacag acggacagtg   60

tggtggcaac attgaaagcc tcgtaccctg g   91

<210> 33
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 33
tgacactggc aaaacaatgc a   21

<210> 34
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

<400> 34
ggtccttttc accagcaagc t   21

<210> 35
<211> 94
<212> DNA
<213> Artificial sequence

<220>
<223> Real time PCR amplicon

<400> 35
tgacactggc aaaacaatgc agactttgct ttccttggtc aggcagtata atccaaagat   60

ggtcaaggtc gcaagcttgc tggtgaaaag gacc   94

<210> 36
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Single strand DNA oligonucleotide

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<400>  36
tgggaacaag agggcatctg                                                    20


<210>  37
<211>  22
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Single strand DNA oligonucleotide

<400>  37
ccaccactgc atcaaattca tg                                                 22


<210>  38
<211>  86
<212>  DNA
<213>  Artificial sequence

<220>
<223>  Real time PCR amplicon

<400>  38
tgggaacaag agggcatctg ctaaagtttc agattccatt tctgctcagt atccagtagt        60

ggatcatgaa tttgatgcag tggtgg                                             86


<210>  39
<211>  160
<212>  PRT
<213>  Homo sapiens

<400>  39
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Leu Asp Gly Phe Val Phe Val Val Ala Ser Asp Gly Lys Ile Met Tyr
1               5                   10                  15


Ile Ser Glu Thr Ala Ser Val His Leu Gly Leu Ser Gln Val Glu Leu
            20                  25                  30


Thr Gly Asn Ser Ile Tyr Glu Tyr Ile His Pro Ser Asp His Asp Glu
        35                  40                  45


Met Thr Ala Val Leu Thr Ala His Gln Pro Leu His His His Leu Leu
    50                  55                  60


Gln Glu Tyr Glu Ile Glu Arg Ser Phe Phe Leu Arg Met Lys Cys Val
65                  70                  75                  80


Leu Ala Lys Arg Asn Ala Gly Leu Thr Cys Ser Gly Tyr Lys Val Ile
                85                  90                  95


His Cys Ser Gly Tyr Leu Lys Ile Arg Gln Tyr Met Leu Asp Met Ser
            100                 105                 110


Leu Tyr Asp Ser Cys Tyr Gln Ile Val Gly Leu Val Ala Val Gly Gln
```

115   120   125

Ser Leu Pro Pro Ser Ala Ile Thr Glu Ile Lys Leu Tyr Ser Asn Met
    130   135   140

Phe Met Phe Arg Ala Ser Leu·Asp Leu Lys Leu Ile Phe Leu Asp Ser
145   150   155   160

<210>   40
<211>   178
<212>   PRT
<213>   Homo sapiens

<400>   40

Met Lys Glu Lys Ser Lys Asn Ala Ala Lys Thr Arg Arg Glu Lys Glu
1   5   10   15

Asn Gly Glu Phe Tyr Glu Leu Ala Lys Leu Leu Pro Leu Pro Ser Ala
        20   25   30

Ile Thr Ser Gln Leu Asp Lys Ala Ser Ile Ile Arg Leu Thr Thr Ser
        35   40   45

Tyr Leu Lys Met Arg Ala Val Phe Pro Glu Gly Glu Ala Ser Gly Gly
    50   55   60

Arg Pro Gly Thr Leu Gly Ser Pro Ala Ala Pro Ala Gln Ala Gly Ser
65   70   75   80

Ala Ser Gln Pro Ala Gln Arg Gly Cys Arg Gly Leu Ala Ser Arg Ala
            85   90   95

Gly Ala Ser Glu Gly Gly Cys Val Arg Val Phe Gly Phe Gly Ala Gly
            100   105   110

Leu Gly Arg Gly Ala Arg Ala Leu Ala Ala Gln Ala Thr Lys Pro Ser
        115   120   125

Pro Gly Pro Gly Leu Gly Glu Gly Glu Leu Arg Ile Val Pro Gly Ala
    130   135   140

Gly Ser Pro Pro Ala Arg Thr Ala Ser Glu Arg Cys Glu Ser Ala Gly
145   150   155   160

Ile Thr Val Arg Pro Lys His Cys Arg Leu Arg Pro Gln Ser Glu His
            165   170   175

Leu Cys

<210>   41

<211> 584
<212> PRT
<213> Homo sapiens

<400> 41

Met Arg Arg Trp Leu Pro Phe Pro Pro Phe Leu Pro Gly Gly Pro Ser
1   5   10   15

Asn Leu Ala Ile Pro Asp Phe Gln Gln His Ser Val Pro Thr Gly Pro
            20   25   30

Ala Val Leu Cys Arg Gly Ala Gly Ser Ser Pro Pro Pro Ser Arg Asn
        35   40   45

Leu Thr Phe Leu Thr Pro Thr Pro Pro Ala Gly Asn His Arg Leu Gly
    50   55   60

Trp Gly Pro Leu Val Leu Gln Glu Ser Ser Ala Asp Phe Ser Pro Ser
65   70   75   80

Leu Pro Ala Met Gly Phe Ala Arg Ser Gln Gly Pro Glu Ala Thr Leu
            85   90   95

Thr Val Asn Thr Ala Gln Gly Lys Gly Gly Ser Arg Thr Thr Ala Gln
            100   105   110

Pro Gln Glu Arg Pro Ser Ser Arg Glu Lys Asp Ser Cys Gln Gly Ala
        115   120   125

Phe Val Pro Arg Pro Ser Tyr Pro Ala Leu Pro Gly Gly Ser Cys Leu
    130   135   140

Trp Phe Ser Ala Arg Gly Thr Thr Ala Leu Arg Thr Ala Val Gly Gly
145   150   155   160

Trp Gly Trp Gly Trp Ala Trp Pro Ser Val Gly Trp Gly Gly Gly Arg
            165   170   175

Ala Ser Ser Ala Arg Ser Ser Leu Arg Arg Gly Arg Ser Gln Gly Ser
            180   185   190

Gly Ala Arg Leu Val Gly Arg Glu Thr Pro Gly Ala Leu Ser Ser Gly
        195   200   205

Glu Val Gly Val Gln Ala Gly Lys Pro Gly Val Ser Arg Gly Ala Ala
    210   215   220

Val Arg Ser Arg Val Gln Gln Glu Gly Ser Pro Asp Gly Gln Val Pro
225   230   235   240

Leu Ser Pro Gly Ala Gln His Trp Leu Val Ala Phe Ala Glu Val Val

```
                         245                     250                         255


    Lys Lys Gly Arg Arg Pro Val Glu Arg Arg Ser Pro Gly Ile Pro Asn
                260                 265                 270


    Tyr Val Thr Gly Asp Pro Phe Gln Phe Gly Leu Trp Pro Ile Pro Leu
                275                 280                 285


    Ser Pro Pro Ala Asp Trp Ser Leu Leu Ser Gly Ser Pro Gln Pro Phe
        290                 295                 300


    Leu Phe Asn Arg Gly Gln Arg Gly Asp Gly Glu Ser Thr Asp Gly Gly
    305                 310                 315                 320


    Cys Gly Ala Gly Glu Ala Ala Gly Arg Arg Ala Gly Leu Val Gly Arg
                325                 330                 335


    Ala Gly Arg Val Gln Gly Phe Arg Val Thr Cys Pro Ala Pro Arg His
                340                 345                 350


    Arg Ala Gly Arg Cys Ser Leu Pro Ile Cys Phe Arg Pro Ser Ser Arg
                355                 360                 365


    Phe Arg Arg Arg Val Gly Thr Ala Glu Pro Arg Arg Ala Pro Gly Arg
        370                 375                 380


    Arg Arg Gln Gly Ala Gly Ile Ala Leu Ala Ala Gly Arg Ala Ala Ser
    385                 390                 395                 400


    Pro Gly Glu Glu Arg Ser Arg Arg Arg Leu Pro Ser His Pro Ala Thr
                405                 410                 415


    Pro Ala Ser Arg Arg Pro Phe Pro Arg Ser Ala Arg Gln Ile Gln Arg
                420                 425                 430


    Leu Pro Gly Ala Gly Asp Gly Val Val Pro Thr Ala Glu Gly Trp Thr
                435                 440                 445


    Leu Ser Met Ser Asp Ala Ala Cys Gly Gln Pro Tyr Pro Asn Pro Thr
        450                 455                 460


    Ala His Pro Asp Asn Gln Asn Leu Val Arg Pro Pro Gly Ser Cys Leu
    465                 470                 475                 480


    Val Trp Ser Gln Val Leu Ser Ala Pro Ser Pro Gly Pro Phe Thr Leu
                485                 490                 495


    Gln Glu Leu His Ala Pro Leu Thr Ser Ala Phe Pro Trp Gln Gln Arg
                500                 505                 510
```

```
Gly Phe Ala Gly Arg Pro Gly Ser Pro Glu His Ser Ser Pro Leu Pro
        515                 520                 525

Gly Gly Leu Leu Ala Leu Ala Gly Asp Thr Ser Arg Ser Phe Lys Cys
    530                 535                 540

Pro Leu Gln Ser Leu Ile Asn Asp Pro Ile His Ser Pro Leu Leu Ser
545                 550                 555                 560

Phe Val Ser Ala Ile Glu Lys Cys Leu Pro Arg Ala Ala Leu His Phe
                565                 570                 575

Arg Pro Leu Phe Cys Val Leu Leu
            580
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